महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission

Ref. No. MERC/FAC/2022-23/ 0134 **Date: 6 April, 2022**

To,

The General Manager
The Brihanmumbai Electric Supply and Transport Undertaking
BEST Bhavan, BEST Marg
Post Box No. 192
Mumbai 400 001.

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of BEST Undertaking for the month of January, 2022.

Reference:

1. FAC submission dated 02 March, 2022 by BEST Undertaking for prior approval of FAC for the month of January, 2022.
2. Data gaps communicated to BEST vide email dated 03 March, 2022.
3. BEST's response to data gaps on 04 March, 2022.

Sir,

Upon vetting the FAC calculations for the month of January, 2022 as mentioned in the above reference, the Commission has accorded approval for charging FAC of **Rs. 57.64 Crore.** However, the said amount is being adjusted from the FAC Fund and accordingly the FAC chargeable to consumers is as shown in the table below:

Month	FAC Amount (Rs. Crore)
January 2022	**0 (Zero)**

The Commission allows the accumulation of FAC amount of **Rs. (111.81) Crore** which shall form part of FAC Fund and shall be carried forward to next FAC billing cycle with holding cost as per the Order dated 30 March, 2020 in Case No 324 of 2019. Further, as directed in the said Order, BEST Undertaking shall maintain the monthly account of FAC Fund and upload it on its website to maintain transparency of FAC Fund and also for information of all the stakeholders.

Yours faithfully,

(Prafulla Varhade)
Director (EE), MERC

Encl: Annexure A: Detailed Vetting Report for the month of January, 2022.

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ANNEXURE A

Detailed Vetting Report
Date: 6 April, 2022

PRIOR APPROVAL FOR FAC CHARGES FOR THE MONTH OF JANUARY 2022

Subject: Prior Approval of Fuel Adjustment Charges (FAC) submission of BEST Undertaking for the month of January, 2022.

Reference:

1. FAC submission dated 02 March, 2022 by BEST Undertaking for prior approval of FAC for the month of January, 2022.
2. Data gaps communicated to BEST vide email dated 03 March, 2022.
3. BEST's response to data gaps on 04 March, 2022.

1. **FAC submission by BEST Undertaking:**

1.1 BEST Undertaking ('BEST') has submitted FAC submissions for the months of January, 2022 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by BEST, the Commission has accorded prior approval to BEST for FAC amount of Rs. 57.64 Crore. The approved FAC amount shall be adjusted from the FAC Fund and balance amount shall be carried forward to next FAC billing cycle with holding cost as per the Order dated 30 March, 2020 in Case No 324 of 2019 (herein after referred to as "Tariff Order").

2. **Background**

2.1 On 30 March, 2020, the Commission has issued Tariff Order for BEST (Case No.324 of 2019) for True-up of FY 2017-18 and FY 2018-19, provisional Truing-up for FY 2019-20, and Aggregate Revenue Requirement and Tariff for FY 2020-21 to FY 2024-25. Revised Tariff has been made applicable from 1 April, 2021.

2.2 In the Tariff Order, the Commission has stipulated methodology of levying FAC as follows:

"8.2.15 Stabilising variation in consumer bill on account of FAC

………………

8.2.15.4 Therefore, using its powers for Removing Difficulty under Regulation 106 of the MYT Regulations, 2019, the Commission is making following changes in the FAC mechanism specified under Regulation 10 of the MYT Regulations, 2019:

a. Distribution Licensee shall undertake computation of monthly FAC as per

Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:

(i) Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost;

(ii) Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost;

(iii) Such carry forward of negative FAC shall be continued till the accumulated negative FAC becomes 20% of monthly tariff revenue approved by the Commission in Tariff Order. In case of BEST, such limit shall be Rs. 59 Crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism;

(iv) In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism.

8.2.15.5 In order to maintain transparency in management and use of such FAC Fund, the Distribution Licensee shall maintain monthly account of such FAC fund and upload it on its website for information of stakeholders. Further, till date, the Distribution Licensees have been levying FAC up to the prescribed limit of 20% of variable component of tariff without prior approval in accordance with the MYT Regulations, 2015, and submitting the FAC computations on a quarterly basis within 60 days of the close of each quarter, for post facto approval. However, as the Commission has created a FAC fund as stated above to address the increase in fuel prices and power purchase costs, the Commission has modified the FAC mechanism such that the Distribution Licensees shall submit the FAC computations on a monthly basis for prior approval, irrespective of whether FAC is chargeable in a month or whether some amount is accruing to the Fund on account of negative FAC.

8.2.15.6 The details of the FAC as per the Regulations, shall be submitted by the 15th of the every month prior to the month in which the FAC is proposed to be levied and the Commission will endeavour to decide on the same within 10 days so that the same can be levied from the 1st of the subsequent month. This prior approval will facilitate the addressing of any difficulties that may arise in giving effect to this fund. All the details will be submitted by the Distribution Licensee as is being done for approval of FAC on post facto basis. Thus, the FAC to the consumers shall now be levied with prior approval of the Commission"

2.3 Vide its letter dated 20 April, 2020, the Commission communicated the excel formats along with the checklist to file FAC submissions for prior approval to all Distribution Licensees. The Commission also directed all Distribution Licensees to file FAC submissions by 15th of every month prior to the month for which the FAC is proposed to be levied for prior approval.

2.4 Accordingly, BEST has filed FAC submissions for the month of January, 2022 for prior approval of the Commission. The Commission has scrutinized the submissions provided by BEST and has also verified the fuel and power purchase bills provided along with its submissions.

3. Energy Sales of the Licensee

3.1 The net energy sales within licence area as submitted by BEST in the FAC submission and as approved by the Commission are as shown in the table below:

Table 1: Energy Sales Approved and Actual for the Month of January 2022 (MUs)

Consumer Category	Approved by the Commission (MU)	Monthly Approved* (MU)	Actual Sales January, 2022 (MU)
	(I)	(II=I/12)	(III)
HT I- Industry	156.66	13.06	11.40
HT II - Commercial	286.41	23.87	13.89
HT III - Group Housing Society (Residential)	30.63	2.55	1.79
HT IV – Railways/Metro/Monorail	2.14	0.18	0.21
HT V - Public Services			
a) Govt. Edu. Inst. & Hospitals	26.57	2.21	1.76
b) Others	196.57	16.38	12.70
HT-VI EV Charging Stations	-	-	-
Total HT Sales	**698.99**	**58.25**	**41.75**
LT I (A)- Residential (BPL)	0.07	0.01	0.00
LT I (B)- Residential	2,102.61	175.22	136.60
LT II - LT Commercial			
(A)- upto 20 kW	927.29	77.27	56.93
(B) >20 kW and <50 kW	211.04	17.59	10.41
(C) - 50 kW	369.84	30.82	21.03
LT III (A) - Industry < 20 kW	43.21	3.60	8.09
LT III (B) - Industry > 20 kW	90.27	7.52	6.09
LT IV - Public Services			
a) Govt. Edu. Inst. & Hospitals	56.14	4.68	4.04
b) Others	183.95	15.33	11.41
LT V(A) – Agriculture Pumpsets	-	-	-
LT V(B) – Agriculture Others	-	-	0.00
LT VI - EV Charging Stations	0.37	0.03	**1.22**
Total LT Sales	**3,984.80**	**332.07**	**255.83**
Total	**4,683.78**	**390.32**	**297.58**

**- Monthly approved sales is derived based on average of annual sales for comparison purpose.*

3.2 **With respect to sales submitted by BEST as per Guidelines dated 19 May 2021, it**

is observed that the actual sales for the month of January 2022 is 297.58 MU which is lower by 23.76% as compared to the approved energy sales of 390.32 MU. With respect to the consumption, HT category consumption is 41.75 MU which is on a lower side by 28.33% compared to approved monthly HT energy sales of 58.25 MU and the reduction has been noticed by 22.96% on LT side whereby the actual sales is 255.83 MU as compared to approved monthly LT energy sales of 332.07 MU. The major variation was observed across various categories in view of lower sales due to lower activity in commercial / industrial premises and seasonal variation due to drop in temperature coupled with dip in humidity, the use of cooling devices was also decreased in the month of January 2022. However, HT – Railways, LT Industrial (below 20 KW load) and **LT EV Charging Station category have witnessed sales higher than the approved monthly sales.**

3.3 BEST has also submitted the data providing actual billing and estimated billing undertaken for the calculation of total energy consumption for the month of January 2022. BEST further submitted the number of actual and estimated meter readings undertaken for the month of January 2022 as shown below:

Table 2: No. of Meters reading on actual and estimated basis for January 2022

Sr. No.	Particulars	No. of Meters for which actual meter reading is done either manually or through AMR	No. of Meters for which meter reading are estimated.	Total Meters
1	HT	187	0	187
2	LT	1032896	13705	1046601
	Total	**1033083**	**13705**	**1046788**
	%	**99%**	**1%**	**100%**

3.4 Accordingly, the Commission has also analysed the comparison of estimated sales and sales based on actual meter reading for last 6 months and it was observed that the assessed sales percentage has been constant for past several months and is around 1%. Similarly, it was observed that in January 2022, the estimated sales was 1.18% of the total sales.

Table 3: Actual and Estimated Sales of past 6 months

Particulars	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Actual – Mus	352.58	349.68	375.96	367.59	334.58	**294.06**
Estimated – MUs	2.29	2.63	3.18	4.11	3.48	**3.52**
Total	**354.87**	**352.31**	**379.14**	**371.71**	**338.06**	**297.58**
% Sales based on Estimated Reading	0.64%	0.75%	0.84%	1.11%	1.03%	**1.18%**

3.5 **As per the data, the 100% of HT billing is undertaken on actual basis due to Automatic Meter Reading (AMR) in place whereas under LT category, the billing of about 98.69% is undertaken as per actual meter readings and balance 1.31% is still assessed on an estimated basis. Also, with respect to consumption, under LT Category, about 98.63% consumption is undertaken as per actual**

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

meter readings and balance 1.37% is still assessed on an estimated basis.

3.6 Further, comparison of sales of April to January 2022 as compared to last year are as shown below:

Table 4: Monthly Comparison of Sales for Residential, LT (Others) and HT Category

Particulars	LT - Residential (MU)	LT Others (MU)	HT (MU)	Total (MU)
Apr-20	149.90	114.49	39.19	303.58
Apr-21	180.21	126.59	48.81	355.61
May-20	158.43	98.95	42.73	300.11
May-21	199.05	108.25	49.44	356.73
Jun-20	191.74	156.65	41.52	389.91
Jun-21	187.16	105.33	50.67	343.16
Jul-20	164.72	100.36	46.45	311.53
Jul-21	170.11	116.94	51.97	339.02
Aug-20	159.28	90.03	47.03	296.34
Aug-21	176.58	128.43	49.86	354.87
Sep-20	175.55	106.10	46.76	328.41
Sep-21	169.56	133.18	49.57	352.31
Oct-20	180.80	123.36	48.69	352.85
Oct-21	180.08	147.72	51.34	379.14
Nov-20	160.76	118.91	45.94	325.61
Nov-21	179.57	143.57	48.56	371.71
Dec-20	139.66	120.10	46.75	306.51
Dec-21	156.21	133.69	48.17	338.06
Jan-21	125.81	111.98	45.74	283.52
Jan-22	136.60	119.23	41.75	297.58
April 20 – Jan 21	**1,606.65**	**1,140.92**	**450.80**	**3,198.37**
April 21 – Jan 22	**1,735.12**	**1,262.93**	**490.14**	**3,488.19**

3.7 The Commission observes that overall sales for the month of January 2022 is higher than January 2021 due to increase in sales LT Category. This was mainly due to relaxation provided to many of the industrial / commercial activities in January 2022 which was curbed in January 2021 due to widespread COVID-19 Pandemic.

4. Power Purchase Details

4.1 The Commission has approved following sources in the Tariff Order for power purchase by BESTs.

a) Tata Power Company Ltd. (TPC-G)

b) Manikaran Power Limited

c) Renewable Energy (Solar and Non-Solar)

d) Short Term Sources (Bilateral and Power Exchange).

4.2 In addition to the aforesaid, there may be some variation in real time (unscheduled interchange) which will be settled through Deviation Settlement Mechanism as

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

approved by the Commission from 10 October 2021.

4.3 Summary of Power Purchase for BEST is as follows:

<table>
<tr><th>Sr. No.</th><th>Particular</th><th>Compliance</th></tr>
<tr><td>1</td><td>Sources of approved Power Purchase</td><td>BEST has purchased power from approved sources.</td></tr>
<tr><td>2</td><td>Merit Order Dispatch</td><td>BEST has followed merit order for scheduling of power and preference was given to cheapest power.</td></tr>
<tr><td>3</td><td>Fuel Utilization Plan</td><td>Existing contracts of TPC-G at the time of issue of tariff order has expired in July 2020. TPC-G has entered into new coal contracts for 2.2 MT for 2 years further extendable by 2 years as per directions of the Commission in TPC-G MYT Order through Competitive Bidding.</td></tr>
<tr><td>4</td><td>Deviation Quantum</td><td>BEST has overdrawn 2.96 MU as compared to Schedule under Deviation Settlement Mechanism.</td></tr>
<tr><td>5</td><td>Sale of Surplus Power</td><td>BEST has sold 2.10 MU on IEX at Rs. 4.85/kWh (para 5.41 below).</td></tr>
<tr><td>6</td><td>Power Purchase</td><td>Actual Net Power Purchase is 300.58 MU as against approved 420.71 MU due to lower sales.</td></tr>
<tr><td>7</td><td>Source wise Power Purchase</td><td>
<table>
<tr><th>Source Name</th><th>Approved (MU)</th><th>Actual (MU)</th><th>Proportion of each Source in Actual Purchase</th></tr>
<tr><td>TPC-G</td><td>304.72</td><td>210.18</td><td>69.92%</td></tr>
<tr><td>Manikaran Power</td><td>62.05</td><td>57.71</td><td>19.20%</td></tr>
<tr><td>RE Sources</td><td>2.63</td><td>2.99</td><td>1.00%</td></tr>
<tr><td>Net Short Term</td><td>51.32</td><td>26.74</td><td>8.90%</td></tr>
<tr><td>DSM Pool</td><td></td><td>2.96</td><td>0.99%</td></tr>
<tr><td>Total</td><td>420.71</td><td>300.58</td><td>100.00%</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Power Purchase:
a. Section 62 of Electricity Act, 2003</td><td>BEST is procuring power from only one source i.e., TPC-G under Section 62 of EA, 2003.

As part of verification of fixed cost claimed by BEST, the same has been verified from the BEST MYT Order in Case No.324 of 2019.

As part of verification of energy charges claimed by BEST, verification of operational parameters, fuel cost, GCV etc. vis-à-vis the MYT Order/Tariff Regulations is carried out</td></tr>
<tr><td></td><td>b. Section 63 of Electricity Act, 2003</td><td>The Power procurement from Manikaran Power is through competitive bidding and as approved by Commission.</td></tr>
</table>

Sr. No.	Particular	Compliance
		Cost and MUs verified as per Invoice
9	RE Purchase	Cost and MUs verified as per Invoice
10	Short Term Power Purchase	Short-term power purchase invoices of January, 2022 are submitted by BEST. All the power purchase quantum and rate are verified from the invoices and has been considered for FAC calculation.

4.4 **The BEST has purchased 300.58 MU as against approved 420.71 MU from the sources approved by the Commission.** The reduction in Power Purchase is due to reduction in sales of BEST as compared to approved Sales in the month of January, 2022.

4.5 The following table show the variation in average power purchase cost (Rs/kWh) for the month of January, 2022 submitted by BEST as compared to average power purchase cost approved in Tariff Order:

Table 5: Approved and Actual Power Procurement source wise for the Month of January 2022

Particulars	Tariff Order Dated 30.03.2020 FY 2021-22 – Approved			Actual for Jan 2022 as submitted by BEST		
	Net Purchase	Cost	Average Power Purchase Cost	Net Purchase	Cost	Average Power Purchase Cost
	MU	Rs. Crore	Rs/kWh	MU	Rs. Crore	Rs/kWh
TPC-G	304.72	140.09	4.60	210.18	135.09	6.43
Manikaran	62.05	27.40	4.42	57.71	24.07	4.17
RE Power	2.63	2.25	8.56	2.99	2.48	8.27
REC	-	5.97	1.00		24.75	1.20
Short Term	51.32	20.53	4.00	28.84	11.33	3.93
Deviation Quantum				2.96	1.09	3.69
Gross Total	**420.71**	**196.23**	**4.66**	**302.68**	**198.80**	**6.57**
Less: Sale of Power to IEX				(2.10)	(0.96)	4.58
Net Power Procurement	**420.71**	**196.23**	**4.66**	**300.58**	**197.84**	**6.58**

* - Although, power purchase quantum is not approved on monthly basis, the monthly quantum is arrived at based on yearly approved quantum and shown for comparison purpose only

5. Power Purchase Cost

5.1 The Commission has sought detailed bills/invoices for all of the power purchase sources in order to verify the claim of BEST with regards to average power purchase cost for the month of January, 2022. The Commission has verified the Net Purchase, Variable Cost, Fixed Charge and the Power Purchase Cost from the relevant bills/invoices received for all purchasing sources. BEST has purchased power from approved sources as per the Tariff Order.

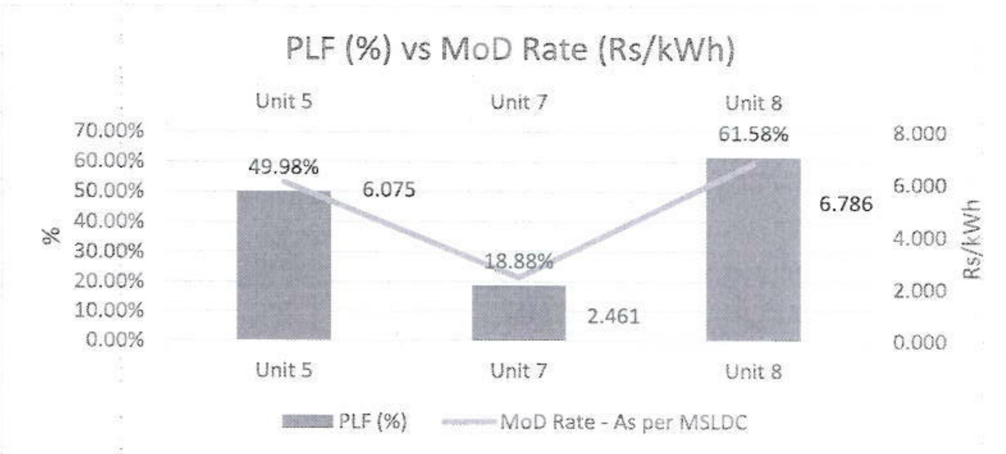
TPC-G

5.2 The Commission in its order dated 2 January, 2019 in Case No 249 of 2018 has allowed BEST to extend its existing PPA for 676.69 MW for a period of five years from 1 April, 2019 to 31 March, 2024. In line with the said Order, BEST share is 51.17% of the total capacity of TPC-G Unit 5, 7 and Hydro whereas its share is 40% in TPC-G Unit 8.

5.3 Since BEST and TPC-D have same generating source i.e. TPC-G, BEST has submitted and relied upon TPC-D's FAC submissions in respect of TPC generating units (TPC-G) to the extent they are relevant to BEST. Analysis of TPC-D's FAC submission for January 2022 in respect of TPC-G's supply has already been undertaken while approving FAC submission of TPC-D for January 2022. Accordingly, the Commission has considered the said submissions of TPC-D in respect of TPC-G.

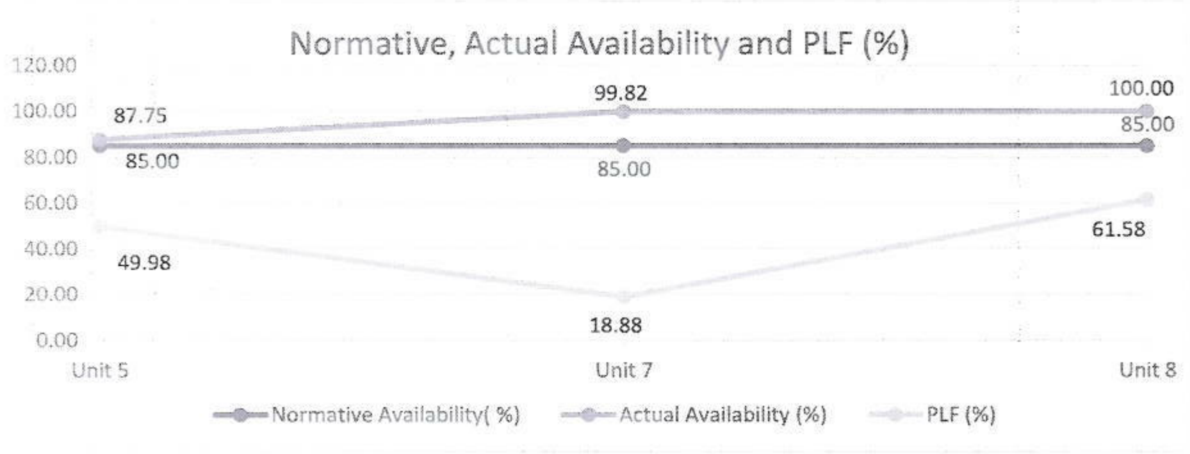
5.4 TPC-G Units 7 and 8 have declared Availability of more than 99% and Unit 5 declared capacity is 87.75% which are higher than the Normative Availability of 85%, however, PLF of the plants was lower than for all the units. In response to data gaps raised by the Commission for lower PLF, TPC submitted that PLF of Unit-5 and Unit-8 is lower due to lower system demand and planned outage of Unit-5 from 28 January 2022 to 02 February 2022 (i.e., for 6 days) and Unit-7 PLF is lower due to lower availability of APM gas, unit was kept under economic shutdown under zero scheduling from 5 January 2022 to 26 January 2022 and the APM gas was utilised in Unit-5 to optimise the cost of generation from Unit-5. In response to data gaps raised by the Commission, TPC-D submitted that 0.55 mmscmd of APM gas is required to run Unit 7 at technical minimum and when daily availability of APM gas is lower than 0.55 mmscmd, it requires support of costly RLNG. TPC-D and BEST has consented to schedule Unit 7 on APM gas only. Accordingly, when the APM gas availability was lower, TPC-G based on consent received from beneficiaries i.e., BEST and TPC-D has informed MSLDC for taking Unit 7 out of service and utilised APM gas in Unit 5 for reducing the overall cost and saved around Rs 0.5 Crore. The Commission notes the submission of TPC-D. The graph showing the comparison of Variable Cost in MoD Stack and monthly PLF for TPC-G thermal/gas units is given below:

Figure 1: PLF of TPC Generating Units



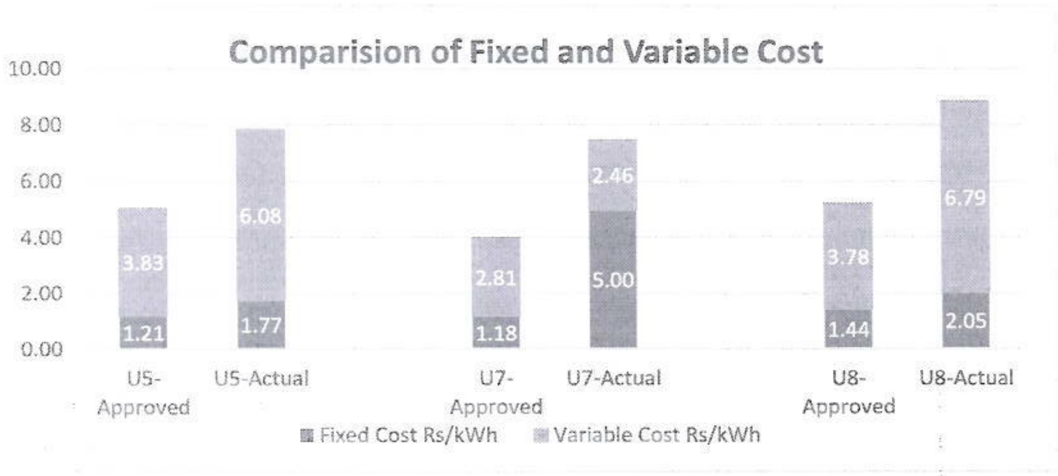
5.5 The graphical comparison of normative availability and actual availability for the month of January, 2022 is as given below:

Figure 2: PAF and PLF of TPC Generating Units



5.6 The entire monthly fixed cost was payable in line with MYT Regulations, 2019 as the cumulative plant availability of Units 5,7 and 8 were higher than the normative availability of 85%. It is observed that Unit-5, Unit-7 and Unit-8 have lower PLF resulting in higher fixed cost per unit than approved by the Commission. Also, the Variable Cost of the Units 5, and 8 was substantially higher than the approved cost mainly due to higher prices of imported coal. The comparison of Actual and Approved Fixed and Variable Cost of Units as shown in the graph below shows the impact of fixed cost due to actual generation.

Figure 3: Comparison of Fixed and Variable Cost of TPC Generating Units



5.7 The Availability of TPC-G units as compared to last year is as given below:

Table 6: Availability of TPC-G plant for the month of January 2022

TPC-G Units	Availability – January 2022	Availability – January 2021
Unit 5	87.75%	83.82%
Unit 7	99.82%	96.99%

Unit 8	100%	81.78%

5.8 The Commission has observed that **BEST has purchased 210.18 MU from TPC-G as against monthly approved quantum of 304.72 MU.** Further, the Commission has verified that the payment of Fixed Charges for all the Thermal/Gas Units as well as Hydro Units have been worked out based on the cumulative availability as per the provisions of MYT Regulations, 2019.

5.9 The Commission in its Order dated 30 March, 2020 in Case No 300 of 2019 in respect of Fuel Utilisation Plan of TPC-G as held as follows:

"7.17.7 Regarding the imported coal, it is submitted that Thermal Generating Station at Trombay needs ultra-low sulphur, low ash and Mid GCV coal to adhere with the stringent environment norms. Since, PPAs were not finalised during the year 2019 and there was uncertainty with respect to future tie-ups, the coal tie-ups were done only for a period of one year. The long term contract with Adaro is valid till 2020. Also, annual contract with Kideco and with Avra are valid upto July 31, 2020.

7.17.8 Regarding further fuel arrangement, the Commission notes the TPC-G's submission that, existing PPAs are valid till March 31, 2024 and hence, it is exploring the options to tie up Coal on annual basis or on term basis, to get competitive prices for the required quantity in the best interest of consumers.

7.17.9 As regards Gas Contract, the Commission notes that existing APM gas Contract with GAIL is valid upto December 31, 2020. TPC-G submitted that it will be approaching GAIL for renewal of the contracts for further period as per usual practice.

7.17.10 It is the primary responsibility of Generating Companies to ensure supply of fuel for operation of the plant However, the Commission, in the present Order, has reviewed the fuel arrangement to ensure the availability of plant. Further, TPC-G has tied up its capacity with BEST and TPC-D, which are supplying power to Consumers in Mumbai city. The Commission notes that TPC-G has entered into Fuel Supply arrangement for shorter period in view of uncertainty of PPAs. The existing Coal contracts are valid upto July & August 2020 and Gas Contract upto December 2020. There is limited time available for entering into Fuel Supply contract. Hence, the Commission directs TPC-G to enter into fuel supply contracts or arrangement so as to ensure the supply of fuel till the validity of PPA, i.e., upto March 31, 2024 through transparent process of Competitive Bidding. Further, TPC-G is directed to submit its Status report, on arrangement of Fuel Supply for future period, to the Commission within three (3) months from the date of this Order."

5.10 TPC-G's existing contracts for coal purchase expired in July 2020. Vide its letter dated 8 July, 2020, TPC-G informed that it has entered into coal contracts for 2.2 Million MT for two years from 1 August, 2020 onwards and further extendable by two years through competitive bidding. The Commission notes that the purchase of coal has been from the contracts entered into by TPC-G. The existing contracts which

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

were approved by the Commission in the MYT Order as part of Fuel Utilisation Plan have expired and new contract have been entered through Competitive Bidding. Accordingly, the new contracts for purchase of imported coal will now be considered as part of Fuel Utilisation Plan. TPC-D has also signed contract with GAIL for supply of APM Gas for the period 7 July, 2021 to 6 July, 2026.

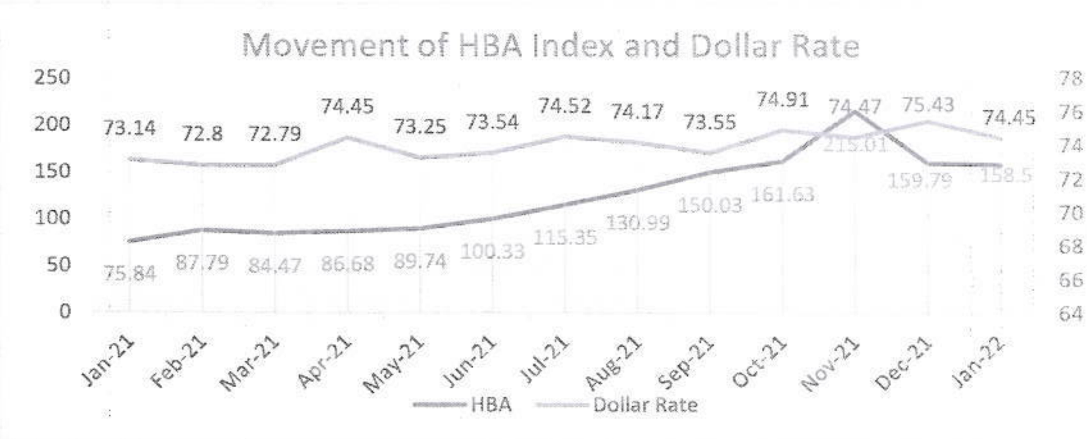
5.11 **The APPC for power procured from TPC-G, which generates power on Imported Coal, Domestic Natural Gas (under APM mechanism), Oil (LSHS), imported RLNG and hydro has been worked out at Rs.6.43/ kWh as against the approved rate of Rs. 4.60/kWh.**

5.12 **The variation in APPC is mainly on account of increase in imported coal price for January, 2022 and also due to higher fixed charge payment per unit due to lower** generation (PLF) from Units 5, 7 and 8.

5.13 **The landed cost of coal for energy charge computation as claimed by TPC-G is Rs. 11817.64/MT as compared to approved rate of Rs. 6,907.09/MT. It can be seen that the actual landed price is higher as compared to approved rate in the Tariff Order.** In response to query raised by the Commission in respect of higher rate of TPC, TPC submitted that Tata Power-G thermal power plant at Trombay is operated under 100% Indonesian coal. The price of this coal is based on HBA Index, which is internationally accepted. Since few months, HBA Index has gone up substantially (e.g. HBA Index for September'21 – 150.03$/MT, October'21 – 161.63/MT, November'21- 215.01$/MT, December'21- 159.79$/MT and January'22 – 158.5$/MT) and as an effect imported coal prices have gone up, owing to which Trombay Cost of Generation has increased. BEST has made effort to purchase cheaper power from the alternate source at comparatively lower rate (28.84 MU were purchased at Rs 3.93/kWh) so as to compensate the costly power from TPC-G Unit-5 & Unit-8. The Commission observes that there has been increasing trend in the imported coal price primarily attributed to demand supply position of the global coal market which is reflected in the HBA index for the last few months. Although HBA index was the lower in January, 22 as compared to December, 21, it seen that HBA index is almost 2 times as compared to January, 2021. Further, there is a marginal decrease in the dollar rate in the month of January, 22 as compared to December, 21. It is also observed that the price of APM Gas was Rs 15,481.44/SCM in January, 2022 which is less than the approved rate of Rs.17,653.75/SCM as approved in MYT Order. However, the Commission notes that prices of APM Gas have increased from Rs. 10,851.59/SCM prevailing in the month of September, 2021 to Rs.15,481.44/SCM. This is due to increase in notified APM gas price from $1.79/MMBTU to $2.90/MMBTU from October 2021 by Ministry of Petroleum and Natural Gas, Government of India.

5.14 TPC-G mainly procures imported coal from Indonesian market. As per the Contract, the coal reference price is HBA index i.e., Harga Batubara Acuan for Indonesian coal which is set by Ministry of Energy and Mineral Resources (Indonesia). The Commission has sought for prevailing HBA index during the aforesaid period along with the detailed computation of FOB price at which the coal has been procured by TPC-G. The graph below shows the trend of HBA index which is considered by TPC-G for energy charge calculations. It can be observed that the HBA index has witnessed substantial increase from February, 2021 with some decrease in January, 2022 as compared to the month of November/December 2021.

Figure 4: Movement of HBA indices and Dollar Rate



* - HBA indices at 6,322 kcal/kg GAR coal with 8% total moisture, 15% ash as received and 0.8% sulphur
$ - Dollar Rate source - www.x-rates.com (Average rate for the month for representation purpose and may not be a reference rate at which Coal is procured)

5.15 The Commission has also sought coal purchase bills considered for January, 2022. The Commission has scrutinised the bills submitted and computed the purchase price of coal for the month of January, 2022 as shown in Table below:

Table 7: Computation of Purchase price of Coal by TPC-G for the month of January 2022

Date	Invoice QTY	GCV	HBA	Correction as per FSA	Invoice Rate	Coal Cost	Freight Rate	BF Correction	Freight Payable	Total Coal Cost	
	MT	kcal/kg	$/MT	$/MT	$/MT	$	$/MT	$/MT	$	$	$/MT
a	b	c	d	e	f	g	h	i	j	k	l
13-Dec-21	63200	4756	159.79	59.22	100.57	6356024	10.57	0.49	698992	7055016	111.63
01-Jan-22	60810	4677	158.50	63.07	95.43	5803098	10.57	0.80	691410	6494508	106.8
Total	**124010**	**4717**	**159.16**	**61.11**	**98.05**	**12159122**	**10.57**	**0.64**	**1390402**	**13549524**	**109.26**

5.16 TPC-D has submitted the detailed coal computation for the coal purchased in January, 2022 and also the reconciliation of coal cost considered in Form F12 along with each coal invoice. The coal cost is arrived on the basis of Goods Receipt Note (GRN) in the SAP system which is dependent on the rate of coal purchase (in Rs./MT or USD/MT) considered at the time of coal order (PO) booking. However, the coal cost mentioned in the coal invoice is as per the base price of coal purchase (in Rs./MT or USD/MT) arrived on the basis of actual gross calorific value, Moisture content, Ash content, Sulphur content, HBA indices etc. Once the invoice is booked in the SAP system after GRN of full coal quantity of a shipment, the cost as per coal invoice gets booked against each shipment in the SAP system in order to make payment to the supplier. To facilitate this, the difference between coal cost in Goods Receipt Note (GRN) and coal cost in the invoice is booked as adjustment entry in the SAP. Hence, the coal inventory gets valued ultimately at the invoice values and at the coal purchase rate (in Rs./MT or USD/MT) prevailing on the date of billing.

5.17 Further, as the coal purchase during a month is generally not utilised in the same month, hence, there is a variation in above computed coal price vis-à-vis coal price as considered by TPC-G for energy charge calculations. The cost of coal for energy charge computation pertains to coal consumed during the respective months which is arrived based on the actual cost of coal inventory as well as the purchased coal cost received in the coal yard.

5.18 Apart from above, the Commission has also sought for third party sampling report for GCV verifications. TPC has submitted the third-party sampling certificate for the respective period. The Commission has verified the document submitted and found to be in order. TPC has also considered the stacking loss as per norms approved by the Commission while computing the Energy Charges.

5.19 From the Table above, the basic purchase cost of imported coal including freight during the month of January, 2022 as per bills submitted worked out at USD 109.26/MT. TPC-D has booked Rs. 8,099.94/MT (i.e. Rs. 7,215.57/MT for Coal and Rs. 884.37/MT for freight). Also, other coal handling charges such as insurance, handling and wharfage charges, taxes and duties, clean energy cess and other miscellaneous charges considered by TPC are in line with the average prices approved in the previous quarters and accordingly, the total landed cost of coal arrived is Rs. 10,806.68 MT. Accordingly, the break-up of the cost as submitted by TPC and as considered by the Commission against the procurement of coal for the month of January, 2022 is as given below:

Table 8: Break-up of Coal Cost for the month of January 2022 for TPC-G

Sr. No	Particular	Source / Formula	Units	As Submitted – Coal Cost	As Approved – Coal Cost
1	Basic Coal cost + Freight in Rs.	As submitted	Rs./MT	8,099.94	8,099.94
2	Excise + Custom Duty + CE Cess+ Insurance	As submitted	Rs./MT	854.39	854.39
3	Handling and Wharfage	As submitted	Rs./MT	660.64	660.64
4	Other Fuel Handling Charges	As submitted	Rs./MT	1,067.15	1,067.15
5	Other Adjustment	As submitted	Rs./MT	124.56	124.56
6	**Total as per Form 12**	**Sum (1:5)**	**Rs./MT**	**10,806.68**	**10,806.68**

5.20 It is observed that there is difference in coal cost considered in Form 11 and Form 12. TPC-D submitted that the difference in the cost is due to Foreign exchange variation due to difference in dollar rate at the time of booking of Purchase Order and the actual payment made to vendor and the employee cost. Accordingly, the coal consumption cost considered by the Commission as per Form 11 is as given below:

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

Table 9: Coal Consumption Cost for the month of January 2022 of TPC-G

Particulars	Units	TPC Submission	As Approved
Form F12 - Coal Consumption Cost	Rs/MT	11,567.57	11,567.57
Foreign Exchange Rate Variation	Rs/MT	214.21	214.21
Employee Cost	Rs/MT	35.86	35.86
Form F11 - Coal Consumption Cost	Rs/MT	11,817.64	11,817.64

5.21 **In view of the above, the Commission has considered APPC of Rs 6.43/kWh as against approved rate of Rs. 4.60/kWh for power purchased from TPC-G. The APPC varies due to increase in imported fuel price resulting in higher variable cost of Unit-5 & 8, and higher Fixed Cost/unit of power purchased from Unit-5, Unit-7 and Unit-8 due to lower generation.**

5.22 Variation in power purchase expenses from TPC-G can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from TPC-G (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
January 2022	(60.76)	55.76	(5.00)

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Manikaran Power Limited (Medium Term PPA)

5.23 The Commission in its Order in Case No. 249 of 2018 dated 2 January, 2019, allowed BEST to tie up 100 MW Power with M/s. Manikaran Power Ltd. through M/s. Sai Wardha Power Generation Ltd for 5 years from 1 April, 2019 to 31 March, 2024 and accordingly Medium Term PPA was signed on 24 May 2019.

5.24 The Commission has noted that there was delay in signing of agreement along with subsequent events as stated by BEST in its MYT Order which has led to the power supply not commencing on 1 April, 2019. However, the power supply has started from April 2020 which was envisaged at the time of issue of Tariff Order.

5.25 As submitted by BEST, it has purchased 57.71 MU at average rate of Rs. 4.17/kWh as against approved rate of Rs. 4.42/kWh. **The reduction in rate is due to damages applied as per clause 11.6.2 of PPA as the availability of power for the month of January 2022 was 82.80%, which is lower than normative availability of 85% PAF.** This has resulted in shortfall of 1.53 MU for the month of January 2022. The damages for lower availability were payable at the rate of 25% of the Fixed Charge i.e. 50 paise per unit against the shortfall unit.

"11.6.2 In the event that Availability in any month is less than the Normative availability, the fixed charge for such month shall be reduced to the extent of

shortfall in Normative Availability and in addition, any reduction below the Normative Availability shall be multiplied by a factor of 0.25 (zero point two five) to determine the Damages payable for such reduction in Availability. For the avoidance of doubt, the parties agree that the damages to be deducted for any reduction in Normative availability shall be 25% (Twenty Five Percent) of the Fixed Charge which is reduced on account of shortfall in Availability below Normative availability".

5.26 Monthly plant availability of Manikaran Power Limited (SWPGL) was less than normative availability due to Unit-4 was under forced outage from 03 January, 2022 to 11 January, 2022 due to abnormal vibration in PA fan and Unit-2 tripped on 13 January, 2022 and the same was synchronized on 16 January, 2022.

5.27 Accordingly, the Commission has considered the said purchase from Manikaran Power Limited for the month of January 2022 as per invoice submitted by BEST. The details of approved v/s actual are as shown in the table below:

Table 10: Power Procurement from Manikaran Power Limited for the month of January 2022

Source	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs. /kWh)	Total Cost (Rs. Crore)	APPC (Rs. /kWh)
Approved	62.05	14.62	2.36	12.78	2.06	27.40	4.42
Actual	57.71	12.32	2.14	11.75*	2.04	24.07	4.17

**-includes damages of Rs. 0.08 Crore payable due to lower availability.*

5.28 Variation in power purchase expenses from Manikaran Power Limited (MPL) can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from MPL (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
January 2022	(1.81)	(1.52)	(3.33)

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Renewable Sources

5.29 BEST has entered into Long term PPA for 20 MW with M/s Walwahn Solar MH Ltd (earlier Welspun) to meet its Solar RPO. The Commission in the Tariff Order has approved the purchase of solar power from the said PPA at Rs. 8.56/kWh.

5.30 Further, the Commission has also approved annual purchase of non-solar and solar

REC's at Floor Price of Rs.1.00/kWh for approximately 716 MUs towards shortfall in meeting RPO.

5.31 **BEST has purchased 2.78 MU of Solar Power at Rs 8.56/kWh for January 2022 from M/s. Walwahn Solar MH Ltd.** The Commission has verified the said purchase from the invoice submitted by BEST and has accordingly considered the said solar purchase for FAC.

5.32 In addition to the above, BEST has also procured Solar and Non-Solar Power under Green Day-Ahead Market (GDAM) launched by IEX at its power trading platform, so as to meet part of its Solar and Non-Solar RPO. Accordingly, for the month of January 2022, BEST has procured 0.09 MU and 0.12 MU at Rs. 4.40/kWh and Rs. 4.46/kWh of Solar and Non-Solar Respectively. The overall power procured through GDAM is 0.21 MU at Rs. 4.44/kWh.

5.33 REC trading was put on hold by the Hon'ble APTEL on power exchange platform vide its interim Order dated 24 July 2020 in the matter of Appeal No. 113 of 2020. Wherein RECs are not available in the market from the month of July 2020. The REC trading session has been resumed in line with the Hon'ble APTEL vide Appeal No. 113 of 2020, 117 of 2020, 118 of 2020, 123 of 2020, 137 of 2020 and 138 of 2020 dated 09.11.2021 and CERC vide order no. 05/SM/2020 dated 18.11.2021.

5.34 Accordingly, BEST has also purchased REC to meet its RPO target in accordance with Regulation 7.6 of MERC (RPO-REC) Regulations, 2019. The relevant provision Regulations is reproduced below;

> "*An Obligated Entity may meet its RPO target by way of its own generation or procurement of power from another RE Project or by purchase from a Licensee or by purchase of RECs or by a combination of these options*."

5.35 BEST has purchased 2,05,600 nos. of Non-Solar REC at Rs. 1.20/kWh in January 2022 from IEX and PXIL. The said rates are inclusive of exchange fees and taxes. The Commission has verified the said purchase from the invoice submitted by BEST and has accordingly considered the said purchase of REC.

5.36 BEST has procured solar power from M/s. Walwahn Solar MH Ltd (approved source) and GDAM from IEX platform (Competitive bidding), resulting in total power procurement of 2.99 MU at weighted average tariff of Rs. 8.27/kWh. **Accordingly, the Commission has considered RE purchase as submitted by BEST.**

5.37 Variation in power purchase expenses from RE Sources can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from RE Sources (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
January 2022	0.30	(0.08)	0.23

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Short Term Purchase

5.38 **With regards to short term purchase, BEST has purchased 28.84 MU at an average rate of Rs. 3.93/kWh as compared to approved rate of Rs. 4.00/kWh**. The overall power purchased from Power Exchange was about 9.59% of Net power procured during the month of January, 2022 mainly to meet the shortfall during day-time.

5.39 Considering the prevailing market prices, the Commission has considered the short-term purchase by BEST for January, 2022.

5.40 Accordingly. variation in power purchase expenses from Short Term Purchase can be divided on account of change in quantum and per unit rate as follows:

Month	Increase in Expenses for power purchase from Short Term (Rs. Crore)		
	On Account of change Quantum of Power Purchase	On Account of change in Per Unit rate of Power Purchase	Total
January 2022	(8.83)	(0.37)	(9.20)

Out of above, variation on account of increased per unit rate is only considered for FAC computation.

Sale of Power

5.41 **BEST has done sale of surplus power to the extent of 2.10 MU during the month at Rs. 4.58/kWh**. Therefore, to optimize power purchase cost, the surplus power of 2.10 MU was sold through power exchange (IEX) from which BEST has earned Revenue of Rs. 0.96 Crore (i.e. Rs. 4.58/Unit). In view of the aforesaid, the Commission has considered the actual quantum and revenue against surplus sale.

Deviation Quantum and Cost

5.42 It was observed that BEST has overdrawn 2.96 MU during the month of January, 2022. **The said deviation quantum is arrived after grossing up T<>D periphery quantum to G<>T periphery by considering the actual transmission loss of 3.26%.** Accordingly, the deviation quantum of 2.96 MU at Rs 1.09 Crore has been considered as per provisional weekly invoice raised by MSLDC for the period 1 January, 2022 to 31 January, 2022. Further, it is observed that BEST has not considered DSM and ADSM charges for calculation of energy charges as well as fixed charges of TPC-G. Also, BEST has considered only DSM charges and not considered ADSM charges for calculation of power purchase cost for deviation quantum.

5.43 **In view of the same, the Commission has considered total deviation quantum of**

2.96 MU (Overdrawn), which contributes to around 0.99% of the total power procurement, for Rs 1.09 Crore at Rs 3.69/kWh.

Approved Cost of Power Purchase

5.44 In view of the above, the overall cost approved in the Tariff Order and actual for the month of January, 2022 considered by the Commission is as shown below:

Table 11: Approved Power Purchase Cost for the month January 2022

Particulars	Source	Power Purchase Quantum (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs. /kWh)	Variable Cost (Rs. Crore)	Variable Cost (Rs. /kWh)	Total Cost (Rs. Crore)	APPC (Rs. /kWh)
TPC-G	Approved	304.72	36.80	1.21	103.29	3.39	140.09	4.60
	Actual	210.18	38.19	1.82	96.89	4.61	135.09	6.43
Manikaran Power*	Approved	62.05	14.62	2.36	12.78	2.06	27.40	4.42
	Actual	57.71	12.32	2.14	11.75	2.04	24.07	4.17
Renewable Power	Approved	2.63	-	-	2.25	8.56	2.25	8.56
	Actual	2.99			2.48	8.27	2.48	8.27
REC	Approved	-	-	-	5.97	1.00	5.97	1.00
	Actual	-	-	-	24.75	1.20	24.75	1.20
Short Term Purchase	Approved	51.32	-	-	20.53	4.00	20.53	4.00
	Actual	28.84			11.33	3.93	11.33	3.93
Sale of Power	Approved	-	-	-	-	-	-	-
	Actual	(2.10)			(0.96)	4.58	(0.96)	4.58
Deviation Quantum	Approved	-	-	-	-	-	-	-
	Actual	2.96	-	-	1.09	3.69	1.09	3.69
Total	**Approved**	**420.71**	**51.42**	**1.22**	**144.81**	**3.44**	**196.23**	**4.66**
	Actual	300.58	50.52	1.68	147.32	4.90	197.84	6.58

** Incentives adjusted in the Variable Cost*

5.45 **Considering the above submission, the Commission allows the power purchase quantum of 300.58 MU for total cost of Rs. 197.84 Crore at average power purchase cost of Rs. 6.58/kWh for the month of January, 2022 as shown in Table above. The actual purchase for same month in FY 2020-21 i.e. January, 2021 was 335.94 MU and power purchase cost was Rs. 135.53 Crore with APPC of Rs. 4.03/kWh.**

Summary

5.46 **To summarise, BEST has optimised its overall power purchase cost by Short term power (28.84 MU at Rs 3.93/kWh from DAM and RTM on IEX) and selling the surplus power of quantum 2.10 MU in IEX at Rs. 4.58/kWh.**

5.47 **However, the overall average power procurement cost has increased due to increase in variable cost for power procurement from TPC Unit 5 & 8 because of increase in imported coal price, procurement of Non-Solar REC and higher per unit fixed charges for power procured from TPC-G purchase due to lower PLF of Unit 5, Unit 7 and Unit 8.**

6. **FAC on account of fuel and power purchase cost (F)**

6.1 The Commission has worked out the average power purchase cost for the month of January, 2022 as shown in above table. The same has been compared with the average power purchase cost approved by the Commission in Tariff Order dated 30 March, 2020 and accordingly arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.

6.2 It is noted that BEST has incurred the per unit Power Purchase cost which is higher than the limits Approved per unit Power Purchase Cost hence the Z_{FAC} January, 2022 is positive as shown in the Table below.

Table 12: Computed Z_{FAC} for the month of January 2022

S. No.	Particulars	Units	January 2022
1	Average power purchase cost approved by the Commission	Rs./kWh	4.66
2	Actual average power purchase cost	Rs./kWh	6.58
3	Change in average power purchase cost (=2 -1)	Rs./kWh	1.92
4	Net Power Purchase	MU	300.58
5	**Change in fuel and power purchase cost (=3 x 4/10)**	**Rs. Crore**	**57.64**

7. **Adjustment for over recovery/under recovery (B)**

7.1 The adjustment for over recovery/under recovery has to be done for the (n-4) month as per provisions of MYT Regulations, 2019. As FAC levied for the month of September 2021 was nil, there would not be any adjustment factor for the month of January 2022 while computing the allowable FAC.

8. **Carrying Cost for over recovery/under recovery (B)**

8.1 As explained in the above paragraph in absence of any adjustment factor for previous month, there is no carrying cost which is to be allowed in FAC for the month of January, 2022.

9. **Disallowance due to excess Distribution Loss**

9.1 Regulation 10.8 of MYT Regulations, 2015 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

"10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of "Rupees per kilowatt-hour":

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

Provided that, in case of unmetered consumers, the Z_{FAC} shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} recoverable"

9.2 The following table provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss if any.

Table 13: Distribution Loss for the month of January 2022

S. N	Particulars	Units	Approved in Tariff Order	January–2022 Actual	Cumulative Actual April 21 to Jan-22	Annual Sliding Loss – Feb 21 to Jan 22
1	Net Energy Input at Distribution Voltage	MU	4,888.10	288.59	3,588.51	4,259.35
2	BEST Retail Sales	MU	4,683.78	297.58	3,488.19	4160.19
3	Distribution Loss (1 - 2)	MU	204.32	(8.99)	100.32	99.16
4	Distribution Loss as % of net energy input (3/1)	%	4.18%	-3.11%	2.80%	2.33%
5	Excess Distribution Loss = [Actual Distribution Loss (4) - Distribution loss approved (4)] x Net Energy Input (1)	MU	-	-	-	-
6	**Disallowance of FAC due to excess Distribution Loss**	**Rs. Crore**	**0**	**0**	**0**	**0**

9.3 As seen from the above table, for the month of January, 2022 the standalone distribution loss is negative and lower than the approved distribution loss. The Commission observes that there is negative standalone loss for the month of January 2022 accordingly clarification was sought from BEST. In response to data gap, BEST submitted that in monthly distribution loss computation, input energy is considered for calendar month and energy billed in the month (output energy) does not correspond to exact calendar month on account of billing cycle spread across consecutive months. However, such variations normalise when cumulative losses for the year is considered. Hence, monthly distribution loss may not be an appropriate indicator of loss figure.

9.4 By considering net energy input at distribution voltage of 288.95 MU for the month of January 2022 and actual energy sales of 297.58 MU for the month of January 2022, the standalone actual distribution loss is works out to -3.11%. The standalone distribution loss for the month may give erratic figure due to consideration of energy sales with different bill generation period. However, the cumulative distribution loss up to the month in financial year may give figure near to target distribution loss. Hence, to determine the actual distribution loss for a month sum of purchase and sales for a period of 12 months is required to be considered. It is observed that cumulative loss of 2.80% up to January, 2022 and annual sliding distribution loss of 2.33% for the period February 21 to January 22 is marginally lower than approved loss. The Commission notes the submission made by BEST.

9.5 Further, the comparison of Distribution Loss for the January 2022 as compared to last year is as given below:

Table 14: Monthly Distribution Loss of FY 2020-21 and FY 2021-22

Particulars	Approved Loss	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Cumulative upto Jan
FY 2021-22	4.18%	2.65%	4.30%	3.15%	8.47%	2.87%	2.19%	6.59%	0.30%	-1.54%	**-3.11%**	**2.80%**
FY 2020-21	4.18%	2.79%	13.92%*	-24.42%$	1.64%	3.37%	1.19%	4.20%	2.62%	4.06%	**6.61%**	**5.86%**

*- Estimated billing undertaken due to widespread pandemic of COVID-19

$ - Negative distribution loss due to accounting of incremented sale units of prior period in June-2020 due to COVID-19 pandemic

9.6 **It is observed that annual sliding Distribution Loss of 2.33% is lower than the approved loss of 4.18%. Accordingly, the Commission has not worked out any disallowance on account of Distribution Loss for the month of January, 2022.**

10. Summary of Allowable ZFAC

10.1 The summary of the FAC amount as approved by the Commission for the month of January, 2022 is as shown in the Table below.

Table 15: Summary of Allowable Z_{FAC} for January, 2022

S. No.	Particulars	Units	January 2022 - As per BEST	January 2022 - As Approved
1	**Calculation of ZFAC**			
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	57.64	57.64
1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	-	-
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	-	-
1.4	**ZFAC = F+C+B**	Rs. Crore	57.64	57.64
2	**Calculation of Per Unit FAC**			
2.1	Energy Sales within the License Area	MU	297.58	297.58
2.2	Excess Distribution Loss	MU	-	-
2.3	ZFAC per kWh	Rs./kWh	1.94	1.94
3	**Allowable FAC**			
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	-	-

S. No.	Particulars	Units	January 2022 - As per BEST	January 2022 - As Approved
3.2	FAC allowable [1.4-3.1]	Rs. Crore	57.64	57.64
4	**Utilization of FAC Fund**			
4.1	Opening Balance of FAC Fund	Rs. Crore	(168.45)	(168.45)
4.2	Holding Cost on FAC Fund	Rs. Crore	(0.99)	(0.99)
4.3	Z_{FAC} for the month (Sr. N. 3.2)	Rs. Crore	57.64	57.64
4.4	Closing Balance of FAC Fund	Rs. Crore	(111.81)	(111.81)
4.5	Z_{FAC} leviable/refundable to consumer	Rs. Crore	-	-
5.0	Energy Sales within the License Area	MU	297.58	297.58
6.0	ZFAC per kWh [(4.5/5.0)*10]	Rs./kWh	-	-
7.0	**Total FAC based on category wise and slab wise allowed to be recovered in the billing month of March 2022**	**Rs. Crore**	-	-
8.0	**Carried forward FAC for recovery during future period (4.5-7.0)**	**Rs. Crore**	-	-

10.2 **BEST has considered the holding cost considering the MCLR + 150 basis points. This turns out to be 8.50% for January 2022 and holding cost worked out is Rs. 0.99 Crore which is also approved by the Commission. The holding cost as calculated will be contributed to the FAC fund and is outlined as below:**

Table 16: Calculation of Holding Cost for the month of January 2022

Calculation of Carrying Cost	
Month	**January -22**
Op. Balance	(140.32)
FAC fund of the Month	57.64
Cl. Balance	**(82.69)**
Interest Rate	8.50%
Interest for the month	(0.99)
Cumulative Interest till previous month	(28.13)
Cumulative Interest till Current Month	(29.13)
Total	**(111.81)**

10.3 It can be seen from the above table that standalone FAC for the month of January, 2022 is Rs. 57.64 Crore. As the FAC is positive, the said amount will be adjusted from the FAC Fund for stabilisation of FAC rate over the period.

11. Recovery from Consumers:

11.1 Regulation 10.9 of MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The ZFAC per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

*$Z_{FAC\ Cat}$ (Rs/kWh) = [Z_{FAC} / (Metered sales + Unmetered consumption estimates + Excess distribution losses)] * k * 10,*

Where:

$Z_{FAC\ Cat}$ = Z_{FAC} component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;
k = Average Billing Rate / ACOS;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly Z_{FAC} shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the Z_{FAC} on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission…."

11.2 The Commission had invoked power of removing difficulties under MYT Regulation, 2019 and made following changes for computation of FAC.

8.2.15.4 Therefore, using its powers for Removal of Difficulties under Regulations 106 of MYT Regulations, 2019, the Commission is making following changes in FAC mechanism stipulated under Regulation 10 of MYT Regulations, 2019:

a. Distribution Licensee shall undertake computation of monthly FAC as per Regulation 10 of the MYT Regulations, 2019 except for treatment to be given to negative FAC as follows:

i. Negative FAC amount shall be carried forward to the next FAC billing cycle with holding cost.

ii. *Such carried forward negative FAC shall be adjusted against FAC amount for the next month and balance negative amount shall be carried forward to subsequent month with holding cost.*

iii. *Such carry forward of negative FAC shall be continued till the accumulated negative FAC becomes 20% of monthly tariff revenue approved by the Commission in Tariff Order. In case of BEST such limit shall be Rs. 59 Crore. Any accumulated amount above such limit shall be refunded to consumers through FAC mechanism.*

iv. *In case such FAC Fund is yet to be generated or such generated fund is not sufficient to adjust against FAC computed for given month, then Distribution Licensee can levy such amount to the consumers through FAC mechanism.*

11.3 Accordingly, the Commission allows the FAC amount of Rs. 57.64 Crore for the month of January, 2022 to be adjusted against the accumulated FAC Fund and shall be carried forward to the next billing cycle with holding cost.

11.4 The Commission in its approval for the month of December, 2021, has directed BEST to carry forward the approved FAC amount of Rs. (168.45) Crore to be accumulated as FAC Fund to be carried forward to the next billing cycle with holding cost. The opening balance of FAC fund along with holding cost is Rs. (169.45) Crore.

11.5 **The Commission in its approval for the month of March 2021 dated 24 May 2021 has decided to accumulate the FAC Fund arising out of negative FAC up to March 2023 along with the holding cost. Accordingly, considering the approved standalone FAC amount of Rs. 57.64 Crore for the month of January, 2022 and opening balance FAC Fund of Rs. (169.45) Crore, the total adjustable amount of Rs. (111.81) Crore is accumulated in the FAC Fund. The Commission allows the BEST to carry forward the accumulated FAC fund of Rs. (111.81) Crore to the next billing cycle with holding cost.**

11.6 **In view of the above, the per unit Z_{FAC} for the month of January, 2022 to be levied on the consumers of BEST in the billing month of March, 2022 is Nil.**